UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,628	09/19/2003	Kenji Inoue	KIN90USA	5070

270 7590 05/31/2005

HOWSON AND HOWSON
ONE SPRING HOUSE CORPORATION CENTER
BOX 457
321 NORRISTOWN ROAD
SPRING HOUSE, PA 19477

EXAMINER	
PIZIALI, ANDREW T	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/664,628	INOUE, KENJI	
	Examiner	Art Unit	
	Andrew T. Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) *9-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/19/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species 1, claims 1-8, in the reply filed on 4/27/2005, is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims refer to a "high molecular weight elastic section" but neither the claims nor the specification define what is considered "high."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6,383,339 to Gstrein.

Gstrein discloses a wet paper web transfer belt comprising a base body, a wet paper web

side layer having a wet paper web-contacting surface, and a machine side layer, said belt having fibers, parts of which protrude from said web-contacting surface (see entire document including column 1, lines 39-67 and Figures 1-4).

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,605,188 to Hagfors et al. (hereinafter referred to as Hagfors).

Regarding claims 1 and 2, Hagfors discloses a wet paper web transfer belt comprising a base body, a wet paper web side layer having a wet paper web-contacting surface, and a machine side layer, said belt having fibers, parts of which protrude from said web-contacting surface (see entire document including column 2, lines 23-53 and Figure 1).

Regarding claim 2, Hagfors discloses that the fibers may have an average protruding length of from 1 to 30 microns (column 4, lines 17-40).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein as applied to claim 1 above, and further in view of USPN 6,605,188 to Hagfors.

Gstrein is silent with regards to specific fiber lengths, therefore, it would have been necessary and thus obvious to look to the prior art for conventional materials. Hagfors provides this conventional teaching showing that it is known in the papermaking belt art to use fibers with an average protruding length of from 1 to 30 microns (column 4, lines 17-40). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fiber protrude 1 to 30 microns motivated by the expectation of successfully practicing the invention of Gstrein.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein as applied to claim 1 above, and further in view of USPN 5,849,395 to Valentine et al. (hereinafter referred to as Valentine).

Gstrein is silent with regards to specific fiber densities, therefore, it would have been necessary and thus obvious to look to the prior art for conventional fiber densities. Valentine provides this conventional teaching showing that it is known in the papermaking art to use high fiber densities to reduce brittleness (see entire document including the paragraph bridging columns 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fiber density high, such as from 10 to 500,000 fibers/cm^2, motivated by the expectation of successfully practicing the invention of Gstrein and/or to reduce brittleness.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein in view of USPN 6,605,188 to Hagfors as applied to claim 2 above, and further in view of USPN 5,849,395 to Valentine.

Gstrein is silent with regards to specific fiber densities, therefore, it would have been necessary and thus obvious to look to the prior art for conventional fiber densities. Valentine provides this conventional teaching showing that it is known in the papermaking art to use high fiber densities to reduce brittleness (see entire document including the paragraph bridging columns 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art

at the time the invention was made to make the fiber density high, such as from 10 to 500,000 fibers/cm^2, motivated by the expectation of successfully practicing the invention of Gstrein and/or to reduce brittleness.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein as applied to claim 1 above, and further in view of any one of USPN 4,500,588 to Lundstrom (hereinafter referred to as '588) or USPN 4,529,643 to Lundstrom (hereinafter referred to as '643).

Gstrein discloses that a variety of polymers may be used to create the polymer layer (column 2, lines 4-6), but Gstrein does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each disclose that it is known in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references specifically mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests the use of a high molecular weight elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein in view of USPN 6,605,188 to Hagfors as applied to claim 2 above, and further in view of any one of USPN 4,500,588 to Lundstrom or USPN 4,529,643 to Lundstrom.

Gstrein discloses that a variety of polymers may be used to create the polymer layer (column 2, lines 4-6), but Gstrein does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each disclose that it is known in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references specifically mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests the use of a high molecular weight elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein in view of USPN 5,849,395 to Valentine as applied to claim 3 above, and further in view of any one of USPN 4,500,588 to Lundstrom or USPN 4,529,643 to Lundstrom.

Gstrein discloses that a variety of polymers may be used to create the polymer layer (column 2, lines 4-6), but Gstrein does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each disclose that it is known

in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references specifically mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests the use of a high molecular weight elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,383,339 to Gstrein in view of USPN 6,605,188 to Hagfors in view of USPN 5,849,395 to Valentine as applied to claim 4 above, and further in view of any one of USPN 4,500,588 to Lundstrom or USPN 4,529,643 to Lundstrom.

Gstrein discloses that a variety of polymers may be used to create the polymer layer (column 2, lines 4-6), but Gstrein does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each disclose that it is known in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references specifically mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests the use of a high molecular weight elastic

material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

15. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,605,188 to Hagfors as applied to claims 1 and 2 above, and further in view of USPN 5,849,395 to Valentine.

Hagfors is silent with regards to specific fiber densities, therefore, it would have been necessary and thus obvious to look to the prior art for conventional fiber densities. Valentine provides this conventional teaching showing that it is known in the papermaking art to use high fiber densities to reduce brittleness (see entire document including the paragraph bridging columns 1 and 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fiber density high, such as from 10 to 500,000 fibers/cm^2, motivated by the expectation of successfully practicing the invention of Hagfors and/or to reduce brittleness.

16. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,605,188 to Hagfors as applied to claims 1 and 2 above, and further in view of any one of USPN 4,500,588 to Lundstrom or USPN 4,529,643 to Lundstrom.

Hagfors discloses that a variety of polymers may be used to create the polymer layer, including polyurethane (column 3, lines 21-25), but Hagfors does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each

disclose that it is known in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references and Hagfors each mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests the use of a high molecular weight elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

17. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,605,188 to Hagfors in view of USPN 5,849,395 to Valentine as applied to claims 3 and 4 above, and further in view of any one of USPN 4,500,588 to Lundstrom or USPN 4,529,643 to Lundstrom.

Hagfors discloses that a variety of polymers may be used to create the polymer layer, including polyurethane (column 3, lines 21-25), but Hagfors does not specifically mention the use of a high molecular weight elastic polymer. The Lundstrom references ('588 and '643) each disclose that it is known in the papermaking art to use an elastomeric polymer material because some applications require a higher compressibility (see entire documents including column 3, lines 17-25 of '643 and column 3, lines 57-65 of '588). Considering that the Lundstrom references and Hagfors each mention polyurethane, while the Examples of the current specification specifically use polyurethane, it appears that the prior art teaches and/or suggests

the use of a high molecular weight elastic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer layer from any suitable polymeric material, such as a high molecular weight elastic polymer, because some applications require a higher compressibility and because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

5/25/05

ANDREW T. PIZIALI
PATENT EXAMINER